

IN THE SPECIFICATION

Before Paragraph 1, please delete the following:

~~DEVICE FOR FASTENING A GUIDE RAIL TO A WALL~~

Please insert the following new Paragraph 0000.5:

CROSS-REFERENCE

[0000.5] This non-provisional application claims benefit of German Application Number 202 10 571.7 filed on July 9, 2002, which disclosure is hereby incorporated by reference herein.

Please insert the following before Paragraph 1:

BACKGROUND AND SUMMARY OF THE INVENTION

[0001] The present invention relates to a device for fastening a guide rail to a wall, particularly a rear wall of a slide guide, ~~according to the preamble of Claim 1.~~

[0002] From German Patent Document DE 38 32 701, a fastening arrangement for a guide rail of a slide guide is known, in which a guide rail has a folded-back lug at the rearward end, which lug is provided with detent teeth at the lateral edges. This lug can be inserted into a holding fitting which can be fixed to the rear wall of a piece of furniture. The holding fitting has two web sections between which a receiving opening is provided for inserting the lug. On the web sections, detent teeth are again provided which can be connected in a resilient manner with the detent teeth of the lug. ~~It is a disadvantage of this known~~ For this fastening arrangement, that the precision of the guidance of the lug is limited, particularly since also an only a step-by-step adjustment can be carried out by means of the detent teeth. In addition, the stability of the guide is limited as a result of the bendable web sections because only two guiding surfaces are present. ~~Finally, it is also disadvantageous~~ An aspect of the above-mentioned fastening arrangement is that the lug is pulled out of the bendable body of the fitting during an adjusting movement out of the opening of the fitting.

[0003] ~~It is therefore an object~~ An aspect of the present invention ~~to improve the~~ related to a fastening of a guide rail on a fitting ~~in such~~ that an unintentional detachment of the guide rail from the fitting is avoided and the possibility of adjusting the position of the guide rail relative to the fitting is improved.

[0004] This object is achieved by means of a device for fastening a guide rail on a wall having the characteristics of Claim 1. The present invention, then, is a device for fastening a guide rail, having a web-shaped holding element, to a wall. The device includes a fitting having an upper wall and a lower wall that are connected on a guiding section of the fitting by a rearward and a forward wall. The holding element is adapted to be displaceably received in the guiding section. The fitting has a side wall spaced away from the guiding section. The guide rail is adapted to be continuously displaceable between a first end position, in which a portion of the guide rail rests against the guiding section, and a second end position, in which a portion of the guide rail rests against the side wall.

[0005] According to the invention, ~~the fitting has a side wall spaced away from the guiding section, and the guide rail can be displaced continuously between a first end position, in which the guide rail rests laterally against the guiding section of the fitting, and a second end position, in which the guide rail rests against the side wall.~~ As a result of the continuous displaceability or adjustability, a finer adjustment of the guide rail on the fitting can be achieved. Furthermore, as a result of the side wall being situated opposite the guiding section, it is prevented that the guide rail may be prevented from being accidentally be removed from the fitting, in which case tThe side wall represents a visual as well as a stable protection against a an undesired removal of the holding device element from the fitting. In this case, As noted, the web-shaped holding device element can be moved continuously between the two end positions, in which case, allowing greater forces can also to possibly be absorbed by the mutually connected walls of the fitting. In addition, as a result of the side wall, an unintentional pulling out of the guide rail is avoided.

[0006] According to a preferred embodiment, the web-shaped holding ~~device element~~ is held in a clamping manner in the elastic guiding section, which guiding section may be constructed to be elastic. In this case, tThe clamping can take place in the vertical as well as in the horizontal direction, preferably Preferably an edge-type clamping taking takes place which may ensuresensure a good desired guidance of the holding element.

[0007] If the distance between the side wall and the guiding section of the fitting is smaller than the length of the web-shaped holding ~~device element~~ of the guide rail, the guide rail can be removed from the fitting only by a combined swivelling and displacing movement. However, in the case of a lateral adjustment, it is prevented ~~that the guide rail is prevented from being~~ accidentally removed from the fitting, because the side wall serves as a stop.

[0008] The web-shaped holding ~~device element~~ preferably has two webs or legs which can be inserted into ~~one a receiving element device~~ respectively formed on the guiding section. ~~As a result of the construction of~~ The receiving element may include two webs, and such webs being different from the webs or legs of the holding element. ~~the surface~~ An area on the fitting used for the guidance is enlarged because ~~a clearance exists between the webs, in which area guiding elements of the fitting can engage. This improves the guidance of the web-shaped holding device element and also prevents~~ prevents a rotation of the holding ~~device element~~ within the fitting. ~~In this case, t~~ The web-shaped holding device element may be guided in the area of or adjacent the guiding section and adjacent to the guiding section essentially in a form-locking manner on the upper and lower side-walls of the fitting. ~~In addition, a~~ At least one of the webs may be provided within the guiding section, which web may rests rest on the web-shaped holding ~~device element~~ for the guidance and can also provide a certain clamping. By ~~means of~~ such webs, the holding ~~device element~~ can be guided along several edges, so that a particularly precisely fitting movement is permitted within the receiving ~~device element~~. A profiling is preferably provided on the web-shaped holding ~~device element~~, ~~a~~ At least one web of the fitting rests, via resting by means of two edges or sides, against the profiling, so that a guidance can take place into in a predetermined moving direction.

[0009] Preferably plugs are shaped onto the rear wall of the fitting, ~~which~~ The plugs can be hung into openings at on a wall. As a result, the fitting can be mounted in a simple manner on a piece of furniture. For a secure fastening, the plugs have a flange section, in which case a wall can be inserted between the flange section and the rear wall of the fitting.

[00010] ~~In the following, the invention will be explained in greater detail by means of an embodiment with reference to the attached drawings. The invention will be better understood and appreciated from the following detailed descriptions and with reference to the accompanying drawings.~~

Please insert the following before Paragraph 11:

BRIEF DESCRIPTION OF THE DRAWINGS

[00011] Figure 1 is a perspective view of the fitting parts of a slide guide with an embodiment of a fastening device, according to the principles of the present invention.

[00012] ~~Figures Figure 2A, 2B and 2C are~~ is a perspective view of the fastening device of Figure 1 ~~during the mounting; showing a fitting and a holding element separated from one another.~~

Please insert the following new Paragraphs:

[00012.2] Figure 2B is a perspective view of the fastening device of Figure 2A, showing the holding element being inserted into the fitting.

[00012.4] Figure 2C is a perspective view of the fastening device of Figure 2A, showing the holding element as inserted into the fitting.

[00013] Figures 3A, 3B and 3C are partial cross-sectional top views of the fastening device of Figure 1, ~~id different mounting positions; showing a guide rail in a first end position (Figure 3A), a second end position (Figure 3C) and an in-between position (Figure 3B).~~

[00014] Figures 4A, 4B and 4C are perspective views of the fastening device of Figure 1, ~~during the mounting on a wall; showing the fastening device ready for mounting on a wall (Figure 4A), being mounted on a wall (Figure 4B) and mounted on a wall (Figure 4C).~~

[00015] Figures 5A, 5B and 5C are sectional top views of the fastening device ~~during the mounting similar to Figures 4A, 4B and 4C; of Figures 4A, 4B, and 4C, respectively.~~

[00016] ~~Figures Figure 6A, 6B are two views of the fitting of the fastening device according to the invention;~~ is a perspective view of the fitting of Figures 2A-2C.

Please insert the following new Paragraph:

[00016.5] Figure 6B is an end view of the fitting of Figure 6A.

[00017] Figure 7 is an enlarged frontal-end view of ~~the a~~ fastening device of the present invention, showing a guide rail and inserted in a fitting, the mounted condition according to the principles of the present invention.

Please insert the following before Paragraph 18:

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[00018] A wall 1, for example, a rear wall of a piece of furniture, is ~~used for fastening~~ connected to a guide rail 3 which is held by a fitting 2. The guide rail 3 ~~is~~ may also be fastened in a lateral area to ~~a another~~ wall, which is not shown, or to ~~the a~~ front of a piece of furniture, or to a front-side frame 5 of a piece of furniture ~~(not shown), and~~ therefore has ~~a stationary construction~~. Another rail 4, which carries a drawer, which is not shown, is movably arranged on the guide rail 3.

[00019] As illustrated in Figure 2A, ~~the a~~ connection of the guide rail 3 with the fitting 2 takes place by way of a web-shaped holding element device 6 which is shaped to or extends from a the face of the guide rail 3. The guide rail 3 has a substantially C-shaped construction and includes comprises a center section 30 on which an upper leg 31 with a frontal edge 32 as well as a lower leg 33 are constructed. ~~In a known manner, r~~Roll bodies ~~(not shown)~~ may be provided on the guide rail 30. The web-shaped holding element device 6 is shaped to and/or extends from the center section 30 and has an upper web or leg 7 and a lower web or leg 8. A recess 9 is constructed between the webs legs 7 and 8.

[00020] The fitting 2 has an essentially box-shaped construction and ~~comprises~~ includes a rearward wall 22, which is arranged between an upper wall 20 and a lower wall 21. ~~The terms "rearward" and "forward" refer to the installing situation illustrated in Figure 1 in the case of a slide guidance. In addition, a~~ A forward wall 23 is provided in the an area of the a guiding section 26, which forward wall 23 connects the upper side-wall 20 with the lower side-wall 21.

[00021] On the forward wall 23 a receiving element, or inwardly oriented webs 25, are provided which project into the guiding section 26.

[00022] In addition, the fitting 2 ~~comprises may include~~ a flange section 27 which extends ~~the essentially from~~ rearward wall 22. ~~A~~ At least one plug 29 is molded to the flange section 27, which at least one plug 29 has a holding section 18 on a forward area of the plug 29. In the preferred embodiments of Figures 2A-C, 4A-C, 6B and 7, two plugs 29 are shown, an upper plug 29 and lower plug 29A. A wall 1 can be inserted between the The holding section 18 can be inserted through openings 10, 11 in wall 1 to place the wall 1 between holding section 18 and the flange section 27. The flange section 27 is reinforced by way of a rib 28 connected with the upper side wall 20.

[00023] For mounting the guide rail 3 on the fitting 2, the web-shaped holding device element 6 is first pushed diagonally into the guiding section 26, ~~if this is at all possible because of the diagonal position of the web-shaped holding device 6 (as shown in Figure 2B).~~ The distance between the side rail 24 and the guiding section 26 is less than or smaller than a longitudinal length of the web-shaped holding element 6. As soon as the holding device element 6 is locked inside the guiding section 26, the holding device element 6 with the guide rail 3 ~~must~~ may be swivelled past the side wall 24, so that the web-shaped holding device element 6 is aligned substantially parallel with respect to the rearward wall 22 and the forward wall 23. ~~In this case, the webs~~ Legs 7 and 8 engage in the guiding section 26. The holding element 6 may be held in a locking or clamping manner in a horizontal and/or a vertical direction, in guiding section 26.

[00024] As illustrated in Figures 3A to 3C, the mounted guide rail 3 can be displaced or moved in the a horizontal direction (left to right or vice versa in Figures 3A-3C) between a first end position P_1 and a second position in P_2 . In first end position P_1 , in which the guide rail 3 rests or impacts laterally, by means of at least one leg 7, 8, on the forward wall 23 (Figure 3C), to a In the second end position P_2 , in which a portion of the center section 30 of the guide rail 3 rests on the side wall 24 (Figure 3A). In the second end position P_2 , the a forward section, or at least portions of legs 7, 8 of the holding device element 6 is still arranged inside the guiding section 26, so that a movement of the guide rail 3 in the a longitudinal direction (for example, along a length of rail 4 from upper left to lower right in Figure 1) is prevented. The guide rail 3 is, without any swivelling movement, being captively held on the fitting 2.

[00025] ~~So that the~~ For insertion of the guide rail 3 ~~can take place in a somewhat more smoothly running manner,~~ the rearward wall 22 does not have a continuous construction, ~~so in~~ that a recess 19 exists between the side wall 24 and the rearward wall 22. As a result, the side wall 24 has a somewhat more flexible construction and, ~~during the mounting or insertion of guide rail 3,~~ sidewall 24 can also be pressed slightly toward the rearward wall 22, so that the web-shaped holding device element 6 can be inserted more easily into the guiding section 26.

[00026] Figures 4A to 4C as well as 5A to 5C show ~~the a~~ mounting of the fitting 2 on a wall 1. The guide rail 3 is connected with fitting 2 ~~already during the mounting.~~ It is also possible to mount the fitting 2 on the wall 1 beforehand and only then fasten the web-shaped holding device element 6 on the fitting 2.

[00027] The plug 29 is fitted with the flange holding section 18 into an upper opening 10 of the wall 1, and a the lower plug 29A is fitted into an opening 11 in the wall 1. The fitting 2 and plugs 29, 29A are ~~and is~~ subsequently swivelled, so that the rearward wall 22 rests against the wall 1. In this position, the wall 1 is held between the flange holding section 18 and the ~~the wall flange section 27-22,~~ and ~~t~~ The plugs 29, 29A cannot be moved by a pulling movement in the direction of the longitudinal axis of the guide rail 3. The wall 1 shown in Figures 4A to 5C is of a relatively narrow thickness. When walls of a larger thickness are used, one or more of the length of the plugs 29, 29A, and ~~possibly the construction of the holding section 18, or and the~~ diameter of the openings 10, 11 may have to be adapted correspondingly in order to fit the plugs 29, 29A into the openings 10, 11.

[00028] Figures 6A and 6B show the fitting 2 before the mounting. The guiding section 26 is divided into individual chambers by means ~~of the~~ webs 25, the webs 25 not extending to the rearward wall 22. In addition, the guiding section 26 is bounded by the side upper and lower walls 20 and 21, respectively, as well as by the rearward wall 22 and the forward wall 23.

[00029] As illustrated in Figure 7, the guiding section 26 is designed ~~for a~~ largely configured, via upper wall 21 and lower wall 21, for a form-locking guidance of the webs-legs 7 and 8 of the web-shaped holding device element 6. The webs-legs 7 and 8 may each have a profiling 17 which, in ~~the a~~ a cross-sectional view, represents a bulge or curvatures-curvature pointing to the forward wall 23. Adjacent to the profiling 17, at an end of each of the web-legs 7 and 8, in each case, has a substantially flat construction and portion rests against the rearward wall 22. On ~~the~~ an opposite side end, a portion of each of the web-legs 7 and 8 rests against ~~the a~~ a face or portion of the webs 25 and prevents ~~that the webs-legs 7, or 8 are moved from~~ moving in the direction of the longitudinal axis of the guide rail 3. Furthermore, it is ~~achieved by means of the profiling 17 that the prevents~~ movement of the webs-legs 7 and 8 is in each case limited toward the center 30 of the guiding section 26, because the webs 25 are resting on the profiling 17 by means of a via two edges or sides. As ~~a result of this limitation~~ In addition, by means of the webs 25, ~~it is also avoided that~~ resting on the profiling 17, the web-shaped holding device element 6 is rotated prevented from rotating about an axis that is perpendicular to the sheet plane of the sheet of paper of Figure 7.

[00030] In the ~~illustrated~~ aforementioned embodiments of the present invention, the web-shaped holding device element 6 ~~has~~ includes two webs-legs 7 and 8. ~~Naturally, it is also possible to provide~~ It is conceivable to have only one web-leg, such as 7 or 8 or, more than two webs-legs, such as 7, 8.

[00031] The profiling 17 ~~is also~~ may be used for reinforcing the web-shaped holding device element 6. Should the profiling 17 be eliminated, it ~~would make sense to~~ also may be possible to eliminate the recess 9 and to modify the webs-legs 7 and 8, so that the holding device element 6 receives the required has a desired stability. Then, ~~it~~ it may also be expedient possible to change the position-location and shape of the webs 25 in order to achieve the above-described purpose a desired stability.

[00032] The fitting 2 ~~consists~~ may be made of a plastic material, and the guide rail 3 with the web-shaped holding device element 6 ~~is~~ may be made of metal. However, other materials may also be used for the guide rail 3 and the holding element 6.

Please insert the following new Paragraph:

[00032.5] Although the present disclosure has been described and illustrated in detail, it is to be clearly understood that this is done by way of illustration and example only and is not to be taken by way of limitation. The spirit and scope of the present disclosure are to be limited only by the terms of the appended claims.